FURUNO DEEPSEA WORLD

FURUNO

Simplex/Semi-duplex/Full-duplex, 25-Watt

MARINE VHF RADIOTELEPHONE

with a built-in Class A DSC and CH70 Watch Receiver

Models FM-8800S (Semi-duplex) FM-8800D (Full-duplex)

- Fully meets ITU, IEC, ETSI, IMO for GMDSS and other national standards
- Compact all-in-one unit design includes a 25-Watt radiotelephone, Class A DSC modem and CH70 watch receiver
- Superb voice quality by employing the lower-noise-designed speaker
- Dual/multiple watch on selected channels while monitoring CH16
- Quick access to CH16 key
- Automatic entry of own ship position and time from a GPS navigator
- Easy channel readout with large characters
- ATIS mode available for European inland waterways
- Connects to an office or home via an existing PSTN (Public Switched Telephone Network)
- Simple interface with a printer and VDR (No need for a dedicated Junction Box)



The FURUNO FM-8800S/8800D are high quality, all-in-one marine VHF radiotelephones designed to comply with the GMDSS carriage requirements for safety and general communications. All the necessary functions such as a 25 W VHF radiotelephone, a Class A DSC modem and a CH 70 Watch Receiver are incorporated into the compact transceiver unit.

The FM-8800S offers simplex/semi-duplex, the FM-8800D offers simplex/full-duplex voice communications with superb voice quality. For easy readout of a selected channel, the silver-bright LCD on the front panel indicating the channel numbers with large, easy-to-read characters.
The dedicated rotary control and numeric keys make selecting channels easy. Other standard features are instant access to CH 16, telephone call via a PSTN, Dual Watch and Multiple Watch functions, which allow watch on CH 16 and other selected channels.

Full Class A DSC functions are provided for distress alert transmission and reception, as well as the general DSC communications including Individual Telephone, All Ships, Group and Area Call. The FM-8800S/8800D maintain a continual watch on CH 70 even while you are using another VHF channel. Upon receiving an incoming DSC message, the FM-8800S/8800D give audible and visual alarms.

ATIS (Automatic Transmitter Identification System) is standard for use in European inland waterways. It automatically transmits the ID number when a communication is over or every 5 min while in communication. The ATIS mode and DSC mode are selectable through the menu.

Both units have two types of handsets: a compact hand MIC and a stylish handset. Up to four handsets can be additionally connected via an optional junction box . Each handset also functions as an intercom for onboard communication.

The compact transceiver unit allows a flexible and space-saving installation on a navigation console or the conning position. Flush mount installation is also available.

Catalogue No. V-031

The future today with FURUNO's electronics technology.

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SPECIFICATIONS OF FM-8800S/8800D

GENERAL CHARACTERISTICS

Rules and Regulations

VHF parts	EN 301 925 V1.1.1(2002.09)
VHF ATIS	EN 300 698-1 V1.2.1(2000.08)
DSC parts	EN 300 338 V1.2.1(1999-04)

Class of Emission G3E (telephone), G2B (DSC)

Communication System

FM-8800S Simplex/Semi-duplex
FM-8800D Simplex/Full-duplex

Channels

All VHF channels according to ITU-R Radio Regulations Appendix S18, All channels in FCC Part 80, Max 20 Private channels where permitted by Administrations (preset by the service agent), 10 weather channels (USA and Canada, receive only).

Display

22 characters x 10 lines, character 7 x 11 dots, backlit LCD

TRANSMITTER

Frequency Range

FM-8800S	Simplex/Semi-duplex:	155.000 - 161.475 MHz
FM-8800D	Simplex/Full-duplex:	155.000 - 158.000 MHz

RF Output Power

25 W, reducible to 1 W
US version: CH13, 17, 67, 77 at 1 W, manual override for FULL

Frequency Stability less than ±1.5 kHz

Time-out Timer (For FCC)

Deactivates the transmitter after an uninterrupted transmission of more than 5 minutes

ATIS (Automatic Transmitter Identification System)

According to EN 300 698-1, an ATIS signal is transmitted every 5 min or at the end of transmission, by modulating the carrier at 1,300 and 2,100 Hz

RECEIVER

Frequency Range

FM-8800S	Simplex:	155.000 - 159.600 MHz
	Semi-duplex:	161.475 - 164.200 MHz
FM-8800D	Simplex:	155.000 - 158.000 MHz
	Full-duplex:	160.625 - 162.000 MHz

Receiving System Double-conversion superheterodyne
IF: 51.2375 MHz and 37.5 kHz

AF Output Power 3 W (4 Ω loudspeaker)
2 mW (150 Ω handset)

Audio Response De-emphasis of 6 dB/oct +1/-3 dB

Sensitivity less than 6 dBμV at SINAD 20 dB

Adjacent Channel Selectivity 70 dB

DSC Section

Distress Call and Message

Distress call attempt is transmitted as five consecutive calls. It is repeated after a random delay of between 3.5 and 4.5 min from the beginning of initial call until receiving the distress acknowledge call.

Message Log

Receive: 50 distress messages + 50 non-distress messages
Transmit: 50 messages

Storage 100 files

Interface Nav data: IEC 61162-1
Printer: Centronics

Alarm Audible and visual on receipt of a DSC call
(One dedicated output port also available)

Receiver Characteristics

DSC frequency:	CH70
Calling sensitivity:	Symbol error rate 10^{-2}, input 0 dBμV
Watch keeping:	Continuous watch on CH70
IF:	38.3625 MHz and 37.5 kHz

POWER SUPPLY

FM-8800S: 24 VDC, 0.6 A (Standby), 1.6 A (RX), 4.7 A max. (TX)
FM-8800D: 24 VDC, 0.6 A (Standby), 1.6 A (RX), 7.2 A max. (TX)

ENVIRONMENT

Temperature (IEC 60529):	-15°C to +55°C
Waterproofing (IEC 60945):	IPX4(Transceiver Unit/Hand Set)

EQUIPMENT LIST

Standard

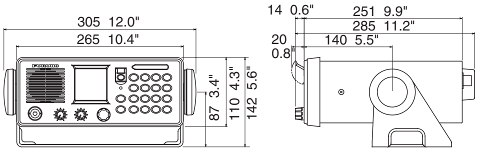
1. Transceiver Unit FM-8800S/8800D — 1 unit
2. Handset HS-2003 or Microphone DM-2003 (Specify when ordering) — 1 unit
3. Handset cradle FP05-05510 — 1 unit
4. Installation materials and spare parts — 1 set

Option

1. Whip Antennas for VHF and DSC with Coaxial Antenna Cable
2. Extension Handset for wing (Dynamic/Carbon) with Wing Receptacle OP05-57/OP05-58
3. Remote Station RB-8800/8810
4. Junction Box IF-8810
5. External Speaker SEM-21Q
6. Printer PP-510
7. Interface Box IF-8820 for DMC-5
8. AC-DC Power Supply Unit PR-240-CE
9. Flush Mount Kit OP05-102

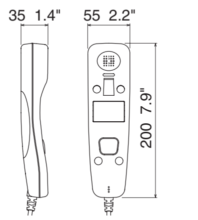
Transceiver Unit

FM-8800S: 5.5 kg, 12.1 lb
FM-8800D: 6.4 kg, 12.6 lb



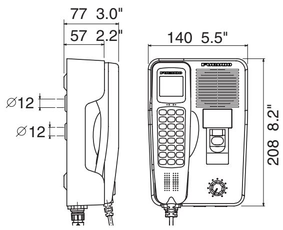
Handset HS-2003

0.2 kg, 0.4 lb



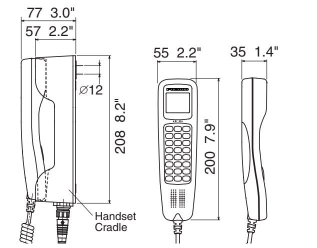
Remote Station RB-8800

1.2 kg, 2.7 lb

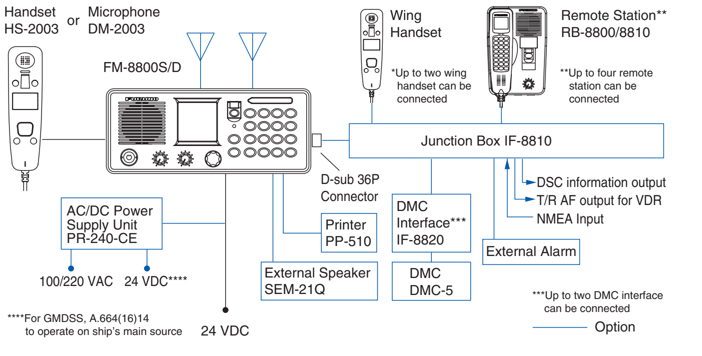


Remote Station RB-8810

0.7 kg, 1.5 lb



Interconnection Diagram



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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